

Chapter 8. Other Considerations Required by CEQA

8.1. Introduction

In addition to an examination of project-level impacts, CEQA requires an EIR to evaluate a project's effect in relation to broader changes occurring or potentially occurring in the surrounding environment. This chapter presents a discussion of CEQA-mandated analysis for irreversible impacts, growth inducement, and cumulative impacts associated with the Proposed Project.

8.2. Irreversible Impacts

8.2.1. Significant Irreversible Environmental Changes

State CEQA Guidelines Section 15126.2(c) requires an EIR to discuss a project's irreversible environmental changes associated with use of nonrenewable resources during its initial phases and continued operation. It also requires a discussion of the Proposed Project's irreversible changes related to potential environmental accidents.

The establishment of MPAs would limit species take and activities in the affected areas and would not directly commit the Department or other agencies to future usage of fossil fuels or other types of nonrenewable resources. No specific development activities are proposed or authorized under the proposed MPAs that would result in the irreversible commitment of resources. Indirect impacts of MPA creation include an increase in fossil-fuel use that would potentially result from the increased activity of Department officers and wardens engaged in regulatory enforcement within the MPAs, and also would potentially result from increased transit times of displaced commercial and recreational fishing vessels.

The creation of MPAs would not directly result in potential environmental accidents. The increased activity of officers and wardens would slightly increase the potential for plane or boating accidents that could release hazardous chemicals into the water. In addition, displacement of fishing effort could result in vessel abandonment by individual fishermen. These indirect impacts have minimal chance of occurrence and do not represent a significant threat to the environment.

8.2.2. Significant and Unavoidable Impacts

A significant unavoidable air quality impact has been identified for the project and Alternatives 1 and 2.

8.3. Growth Inducement

State CEQA Guidelines Section 15126(d) requires an EIR to discuss the extent to which a project would directly or indirectly foster economic or population growth or the construction of new housing, including through removal of obstacles to growth.

The Proposed Project would not have any direct growth-inducing impacts because no development is proposed. It would not indirectly induce growth because it proposes no extension of infrastructure or other environmental modifications that could foster population or economic growth. The protection of species and habitats proposed by the Proposed Project does not enable or encourage development elsewhere.

8.4. Cumulative Impacts

8.4.1. CEQA Analysis Requirements

Although the environmental effects of an individual project may not be significant when that project is considered in isolation, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines Section 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is defined as:

the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355[b]).

Cumulative-impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines Section 15130[b]). There are two approaches to identifying cumulative projects and the associated impacts: the list and projection approaches. The list approach identifies individual projects known to be occurring or proposed in the surrounding area to identify potential cumulative impacts. The projection approach uses a summary of projections in an adopted general plan or related planning document to identify potential cumulative impacts. Because of the large number of planning documents located along the central coast, it was determined that forecasting of cumulative impacts using the projection approach would be unlikely to be accurate. For this reason, this EIR uses the list approach.

8.4.2. List of Cumulative Projects Considered

A wide variety of projects and regulations affecting marine resources exist along the California coast and into Oregon and Washington. In some cases, regulations or restrictions overlap, and others change from year to year. In general, existing regulations, designations, and restrictions have been considered as part of the baseline condition for the project analysis. The projects that were considered for their potential to interact with the Proposed Project and result in cumulative impacts are discussed below.

8.4.2.1. Nature Conservancy Purchase of Trawling Permits and Vessels

In June 2006, The Nature Conservancy purchased six federal trawling permits and four trawling vessels from commercial fishermen in Morro Bay. This purchase has the result of reducing impacts on seafloor communities from fishing activities and recovery of groundfish species. Because the buyout eliminates the potential for increased fishing pressure in new locations, it is not anticipated to have adverse impacts. Therefore, it does not create any cumulative impacts to which the proposed project could contribute. In addition, bottom trawling is not permitted within the study region, thus limiting any potential impacts to or from trawl fisheries.

8.4.2.2. Other MPA Designations in California

The Commission recently designated a network of MPAs for the Channel Islands. In addition, within the next 5 years, the Commission likely will designate network components of MPAs for the remainder of the California coast and offshore islands. Although specific proposals for these network components have not yet been developed other than for the central coast, it is anticipated that they will be similar in nature to those of the Proposed Project. Therefore, these components would have similar impacts to the proposed project, although in many cases the impacts would be in different locations.

8.4.2.3. Restrictions on Commercial Chinook Salmon Harvest

In April 2006, in response to declines in the number of wild fall Chinook salmon returning to the Klamath River, the federal government reduced commercial salmon fishing seasons along 700 miles of the Oregon and California coasts between Cape Falcon in Oregon and Point Sur in California. For 2006, the commercial salmon fishing season has been essentially closed between Coos Bay, Oregon and Fort Bragg, California. Within the Klamath Management Zone (i.e., Eureka, Crescent City, and Brookings), salmon fishing has been greatly restricted. Although this restriction could result in displaced fishing pressure in other locations, the general result is anticipated to be reduced fishing effort. These limits only apply to 2006; future restrictions are speculative.

8.4.2.4. Restrictions on Rockfish Harvest

The coastwide commercial RCA was established in January 2003 by NOAA Fisheries to protect and assist in rebuilding stocks of lingcod and seven species of rockfishes. Within the central coast study region, the RCA is categorized by four gear types: trawl limited-entry, trawl open-access, fixed gear limited-entry, and non-trawl open-access (the latter two are considered non-trawl). Trawl and non-trawl RCAs vary seasonally and regionally. Effective protection equivalent to that of an MPA occurs where the RCA is closed year-round to particular gear types. Because the restrictions change from year to year, particularly in regard to depth range, the analysis of

cumulative impacts is considered from the standpoint of the general effects of such restrictions, rather than their specific locations.

8.4.3. Future Regulations

It is possible that future regulations would result in new listings of endangered species, modification of the extent or management approach for EFH, amendments to fishery management plans, or result in other designations such as marine sanctuaries. Because the requirements under future regulations are not known at this time, they are considered speculative and are not included in this cumulative-impact analysis.

8.4.4. Global Climate Change

According to the National Academy of Sciences, the Earth's surface temperature has risen by about 1 degree Fahrenheit in the past century, with accelerated warming during the past two decades. There is new and stronger evidence that most of the warming over the last 50 years is attributable to human activities. Human activities have altered the chemical composition of the atmosphere through the buildup of greenhouse gases – primarily carbon dioxide, methane, and nitrous oxide. The heat-trapping property of these gases is undisputed although uncertainties exist about exactly how earth's climate responds to them. Increasing concentrations of greenhouse gases are likely to accelerate the rate of climate change (EPA 2006).

Scientists have identified that our health, agriculture, water resources, forests, wildlife and coastal areas are vulnerable to the changes that global warming may bring. But projecting what the exact impacts will be over the 21st century remains very difficult. This is largely because the computer models used to forecast global climate change are still ill-equipped to simulate how things may change at smaller scales (EPA 2006).

More and more attention is being aimed at the possible link between El Niño events – the periodic warming of the equatorial Pacific Ocean – and global warming. Scientists are concerned that the accumulation of greenhouse gases could inject enough heat into Pacific waters such that El Niño events become more frequent and intense. Here too, research has not advanced far enough to provide conclusive statements about how global warming will affect El Niño (EPA 2006).

Although not a project per se, human-induced global climate change could alter the characteristics of marine ecosystems and species populations, as well as social structures along the California coast. However, the specific changes that would result from climate change locally are speculative. Therefore, it has not been considered further for the purposes of this analysis.

8.4.5. Cumulative Effects

8.4.5.1. Consumptive Uses and Socioeconomic Considerations

Socioeconomic effects are not required to be analyzed under CEQA. The Proposed Project's potential for contributions to cumulative physical impacts resulting from social and economic effects are discussed under the relevant topics below.

8.4.5.2. Air Quality

Both the North Coast and South Coast Air Basins are not in attainment for ozone and PM10. As indicated in Chapter 5, the Proposed Project's operational emissions would be well below the MBUAPCD's thresholds of significance and three of the four significance thresholds for the SLOAPCD for criteria pollutants; however, project-related operational emissions would exceed the SLOAPCD significance threshold for NOx emissions. While potential operational emissions resulting from the Proposed Project are for the most part within acceptable levels, emissions within both air districts would contribute to cumulative attainment impacts for ozone and PM10 in the North Coast and South Coast Air Basins.

As with direct impacts, this cumulative impact is considered a potential short-term adverse effect of the Proposed Project, as well as Alternatives 1 and 2. Long-term emissions are anticipated to diminish over time due to the current trend of declining number of commercial fishing vessels, the ARB's ongoing statewide efforts on the regulation of harbor craft diesel engines, and continuing efforts of the Carl Moyer Fund to refurbish or replace aging diesel engines. Therefore, this impact likely does not represent a considerable contribution to long-term cumulative air quality impacts.

8.4.5.3. Water Quality

The analysis of water quality in Chapter 5 considers the issue of vessel abandonment and related water quality impacts. Similar to the proposed project, vessel abandonment could result from other fishing restrictions along the California coast, such as designation of other MPAs. However, as concluded in Chapter 5, the extent of vessel abandonment as a result of the Proposed Project is considered speculative, and substantial abandonment is not supported by economic analysis completed to date (Wilén and Abbott 2006). As such, the Proposed Project is not anticipated to make a considerable contribution to cumulative water quality impacts related to vessel abandonment. Similarly, the project would not affect nonconsumptive uses and therefore would not contribute cumulatively to degraded water quality resulting from such uses.

8.4.5.4. Ecosystems and Habitat

The Proposed Project would have beneficial effects on ecosystems and habitats to varying degrees, depending on the ecosystem and habitat in question and the degree

to which they are protected by the MPA designations. Specifically, the Proposed Project may assist in the rebuilding and/or maintenance of some portions of stocks of the eight groundfish species initially considered to be overfished. Because project impacts are beneficial, the Proposed Project would not contribute to adverse cumulative impacts related to ecosystems and habitat in designated areas.

Although displaced fishing pressure could have locally adverse effects on habitat in nondesignated areas, the benefits to marine ecosystems and habitats within designated areas and to the marine ecosystem as a whole are anticipated to be greater than and to offset any degradation resulting from displaced fishing pressure. Therefore, although the project could result in localized short-term adverse effects, in the long run, it would not contribute considerably to cumulative impacts related to exploitation of marine ecosystems and habitat.

8.4.5.5. Species of Interest

The Proposed Project variably restricts or limits take of certain species within the proposed MPAs and would have a beneficial impact on their habitat and individual survival. Similar effects are anticipated related to other nontarget species that may also be affected by harvest. The impact analysis has concluded that such benefits would be greater than and would offset any declines in species resulting from displaced fishing pressure. Therefore, although the Proposed Project could result in localized adverse effects, it would not make a considerable contribution overall to cumulative impacts related to species of interest.

8.4.5.6. Cultural Resources

The establishment of MPAs and associated restrictions on species take within the areas will in no way disturb or otherwise affect any existing cultural resources sites or artifacts known to exist or potentially existing in the study region. Therefore, the Proposed Project would not contribute to any cumulative impact on such resources.

The study region does not contain any known and recorded TCPs, but there may be unknown and unrecorded TCPs in the area. In accordance with PRC 5097.9, the Department will not interfere with the free expression or exercise of any Native American religious rites or otherwise restrict traditional Native American cultural activities within the MPAs. Therefore, the Proposed Project would not contribute to any cumulative impact on TCPs that could occur.

8.4.5.7. Population and Housing

The Proposed Project would not generate new employment or otherwise directly result in population growth. The extent of indirect effects on population growth from increased tourism and recreation as a result of MPA designation has been determined to be speculative. Therefore, the Proposed Project would not contribute to cumulative impacts associated with population growth along the coast.

Urban decay is not known as a widespread issue along the central California coast, and existing or future regulations are not anticipated to lead to such decay (Wilén and Abbott 2006). As discussed in Chapter 7, the Proposed Project is not anticipated to result in urban decay and therefore would not contribute to related cumulative impacts.

8.4.5.8. Public Services and Utilities

The MLPA requires development of enforcement plans and adequate funding for enforcement. As discussed in Chapter 7, existing law enforcement resources would not be redirected from patrol services elsewhere in the state in order to cover the Proposed Project. Such resources would be obtained thru additional recruitment and supplemented by other agencies with overlapping jurisdiction. Therefore, MPA component designations would not contribute to any cumulative impacts related to law enforcement. The Proposed Project is not anticipated to have any effects on emergency response.

8.4.5.9. Recreation and Research

The Proposed Project would neither cause substantial physical deterioration of coastal waters or other recreational facilities to occur or be accelerated, nor require the construction or expansion of recreational, scientific, or educational facilities. Therefore, it would not contribute to cumulative impacts.

8.4.5.10. Vessel Traffic

The proposed MPA network component could result in displacement of fishing activity and therefore potential increased concentration of vessels (i.e., congestion) in certain locations outside of MPAs. Similar displacement could also result from other fishing restrictions along the central coast, such as designation of MPAs in federal waters. Such increases are anticipated to be minor given the extent of areas that are not designated as MPAs. In addition, captains and operators of individual vessels would still be under the same international navigational rules as existed before the implementation of the MPAs. These rules place the responsibility on individuals to pilot their vessels in a safe manner. Therefore, the Proposed Project would not make a considerable contribution to any cumulative impacts related to the concentration of vessels and oceanic hazards.